

# 970 Series

UHP Stainless Steel Diaphragm Valve  
High Flow, Welded

aerospace  
climate control  
electromechanical  
filtration  
fluid & gas handling  
hydraulics  
pneumatics  
process control  
sealing & shielding

## Value Proposition:

The ultra high purity 970 diaphragm valve offers a high flow device in a 1-1/2" body. The 970 valve offers a variety of manual operators to fit the customer's system requirements. The Air Operated version can be used in UHP systems up to 150 psig. The Manual Operated version can be used in UHP systems up to 250 psig.

The 970 valve has a unique porting shape that is utilized to optimize the flow capacity.



## Contact Information:

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## Product Features:

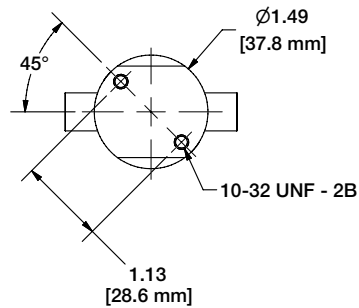
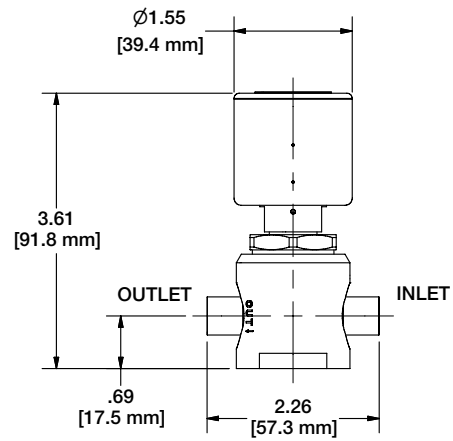
- Standard surface finish of 5 micro inch Ra
- High cycle life (including corrosive service)
- Fully functional from vacuum to 150 psig for AOP valves and 250 psig for manual valves
- Internally threadless and springless
- 100% Helium leak tested
- Standard full internal and external Electropolish
- Minimal particle generation and particle entrapment areas
- Vericlean™, Veriflo's low sulfur high purity 316L Stainless Steel enhances electropolishing, welding, and corrosion resistance

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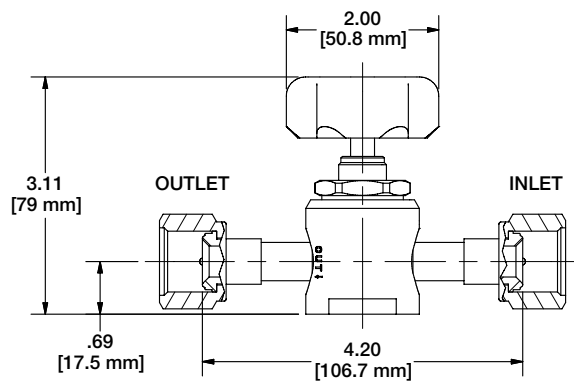
# 970 Series

## Dimensional Drawings

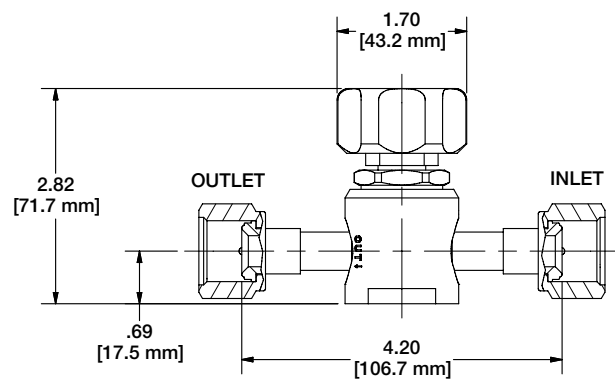
### 970 AOPLPNC



### 970S



### 970I



# 970 Series


## Ordering Information


Build a 970 Series valve by replacing the numbered symbols with an option from the corresponding tables below.


Sample: **9**  **70**  **AOPLPNC**  **S**  **FS8**  **MF**  
Finished Order: **970AOPLPNCFS8FSMF**

 **Basic Series**  
70 = 970

 **Body Material**  
S = 316L Stainless Steel

 **Port Configuration**  
M = Male Face Seal  
F = Female Face Seal

 **Type**  
AOPLPNC = Air Operated, Low Pressure, Normally Closed *Air Connection is 1/8" NPT*

 **Port Style**  
FS8 = 1/2" Face Seal  
TS8 = 1/2" Tube Stub

I = Indicating Handwheel  
S = Spin Handwheel  
AOPLPNO = Air Operated, Low Pressure, Normally Open *Air Connection is 1/8" NPT*

# 970 Series

## Specifications

Materials of Construction	
<b>Wetted</b>	
Body	Vericlean 316L Stainless Steel
Diaphragm	Elgiloy® or equivalent
Seat	PCTFE
<b>Non-wetted</b>	
Cap	17-4 PH Stainless Steel
Nut	17-4 PH Stainless Steel
Actuator Housing	Anodized Aluminum
Operating Conditions	
Maximum Pressure	
Manual	250 psig (17.22 barg)
AOP	150 psig (10 barg)
Minimum Pressure	
	Vacuum
AOP Actuation Pressure	
	70-125 psig
AOP Air Inlet	
	1/8" NPT
Temperature	
	-40°F to 150°F (-40°C to 66°C)

Functional Performance	
<b>Flow Capacity</b>	
AOP versions, Indicator Knob and Handwheel	$C_v .7$
<b>Design</b>	
Burst Pressure	750 psig (52 barg)
Proof Pressure	375 psig (26 barg)
<b>Leak Rate</b>	
Inboard Test Method	
Internal	$\leq 1 \times 10^{-9}$ scc/sec He
External	$\leq 2 \times 10^{-10}$ scc/sec He
<b>Surface Finish</b>	
	5 micro inch Ra
<b>Internal Volume</b>	
	0.59 cc
<b>Approx. Weight</b>	
	1.44 lbs. (0.65 kg)

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VeriClean™ is a trademark of Parker Hannifin Corporation

For additional information on materials of construction, functional performance and operating conditions, please contact factory.

### OFFER OF SALE:

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